

Texas Water Development Board



WATER Conditions

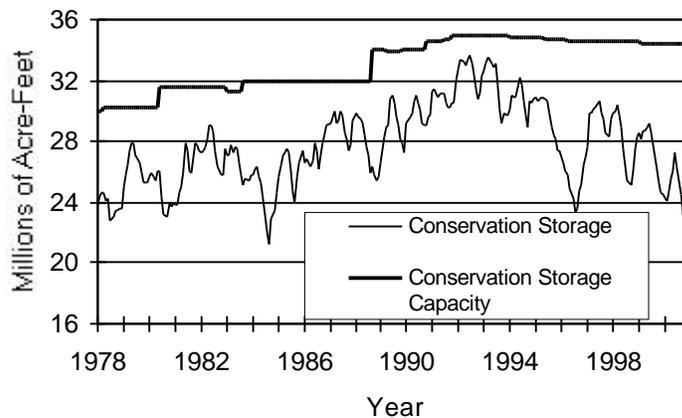
RESERVOIR STORAGE

January 2001

Near the end of January, the 77 reservoirs monitored for this report held 28.6 million acre-feet in conservation storage, or 83.0 percent of the conservation storage capacity of the State's major reservoirs. Statewide total storage is now near normal for this time of year. Storage increased by 1.08 million acre-feet (+3.1% of conservation storage capacity) during the month. Compared to January 2000, storage is up 4.4 million acre-feet (+12.9%). Statewide storage was on the rise at the end of the month

For the month, storage remained nearly constant or increased slightly in all climatic regions except the High Plains (-0.2%) and Southern regions (-0.5%). The East (99.7%), South Central (97.1%), and Upper Coast (100.0%) are all at or near capacity, while the Low Rolling Plains (34.6%), Trans-Pecos (22.3%), and Southern (26.5%) regions remained below 35%. Storage is at 100% in 32 reservoirs, 5 more than last month. Compared to this time last year, storage increased in all but the High Plains, Trans-Pecos, and Southern regions.

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS



Current data are based on elevation near end of month at 77 reservoirs that represent 98 percent of total conservation storage capacity in Texas reservoirs having a capacity of 5,000 acre-feet or more.

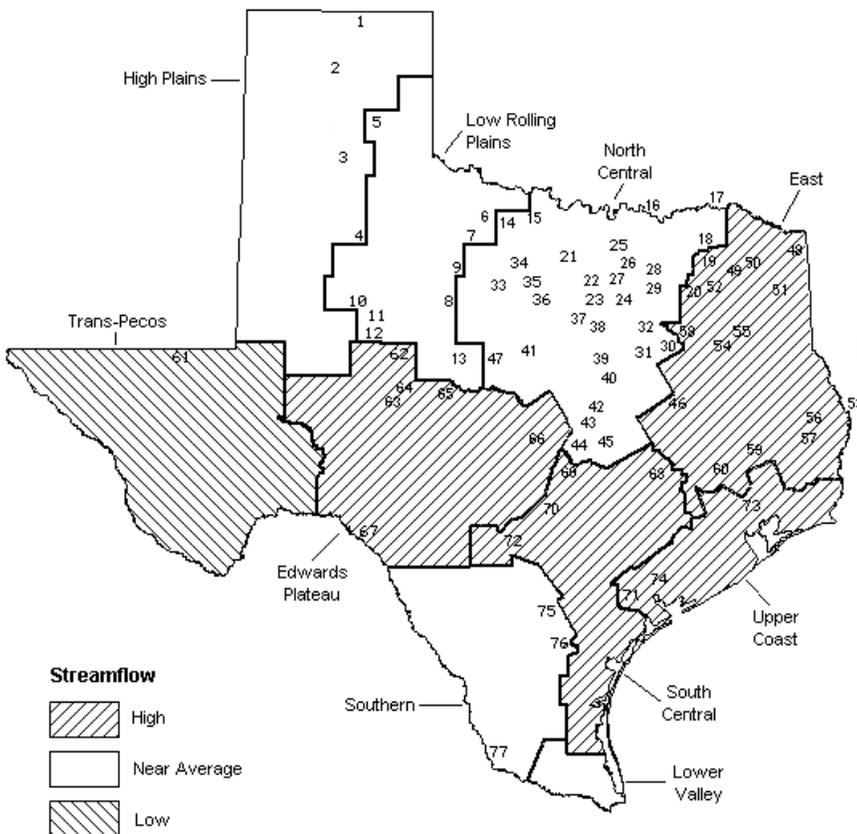
STREAMFLOW

Of 29 reporting index stations in January, computed 30-day mean flows were very high (0% - 5% exceedance) at 1 station, high (5% - 30% exceedance) at 17 stations, near normal (30% - 70% exceedance) at 9 stations, and low (70% - 95% exceedance) at 2 stations. In comparison to December, flows increased at 21 index stations and decreased at 8.

On a regional basis, flows in January were high in the East, Edwards Plateau, South Central, and Upper Coast regions, near normal in the High Plains, Low Rolling Plains, North Central, and Southern regions, and low in the Trans-Pecos region. Low flows were reported at only the Hubbard Creek below Albany and Pecos river near Girvin stations.

JANUARY STREAMFLOW CONDITIONS

Reservoirs Shown on Map



- | | |
|----------------------------------|-----------------------------|
| 1. Palo Duro Reservoir | 40. Waco Lake |
| 2. Lake Meredith | 41. Proctor Lake |
| 3. MacKenzie Reservoir | 42. Belton Lake |
| 4. White River Lake | 43. Stillhouse Hollow Lake |
| 5. Greenbelt Reservoir | 44. Lake Georgetown |
| 6. Lake Kemp | 45. Granger Lake |
| 7. Miller's Creek Reservoir | 46. Lake Limestone |
| 8. Fort Phantom Hill Reservoir | 47. Lake Brownwood |
| 9. Lake Stamford | 48. Wright Patman Lake |
| 10. Lake J. B. Thomas | 49. Lake Cypress Springs |
| 11. Lake Colorado City | 50. Lake Bob Sandlin |
| 12. Champion Creek Reservoir | 51. Lake O' the Pines |
| 13. Hords Creek Lake | 52. Lake Fork Reservoir |
| 14. Lake Kickapoo | 53. Toledo Bend Reservoir |
| 15. Lake Arrowhead | 54. Lake Palestine |
| 16. Lake Texoma | 55. Lake Tyler |
| 17. Pat Mays Lake | 56. Sam Rayburn Reservoir |
| 18. Cooper Lake | 57. B. A. Steinhagen Lake |
| 19. Lake Sulphur Springs | 58. Cedar Creek Reservoir |
| 20. Lake Tawakoni | 59. Lake Livingston |
| 21. Bridgeport Reservoir | 60. Lake Conroe |
| 22. Eagle Mountain Reservoir | 61. Red Bluff Reservoir |
| 23. Benbrook Lake | 62. E. V. Spence Reservoir |
| 24. Joe Pool Lake | 63. Twin Buttes Reservoir |
| 25. Ray Roberts Lake | 64. O. C. Fisher Lake |
| 26. Lewisville Lake | 65. O. H. Ivie Reservoir |
| 27. Grapevine Lake | 66. Lake Buchanan |
| 28. Lavon Lake | 67. Intl. Amistad Reservoir |
| 29. Lake Ray Hubbard | 68. Somerville Lake |
| 30. Richland-Chambers Creek Lake | 69. Lake Travis |
| 31. Navarro Mills Lake | 70. Canyon Lake |
| 32. Bardwell Lake | 71. Coleto Creek Reservoir |
| 33. Hubbard Creek Reservoir | 72. Medina Lake |
| 34. Lake Graham | 73. Lake Houston |
| 35. Possum Kingdom Lake | 74. Lake Texana |
| 36. Lake Palo Pinto | 75. Choke Canyon Reservoir |
| 37. Lake Granbury | 76. Lake Corpus Christi |
| 38. Lake Pat Cleburne | 77. Intl. Falcon Reservoir |
| 39. Whitney Lake | |

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation	Conservation	Change since		Change since		
		Storage Capacity (acre-feet)	Storage Late January 2001 (acre-feet) (%)	Late December 2000 (acre-feet) (%)	Late January 2000 (acre-feet) (%)			
HIGH PLAINS								
Palo Duro Reservoir	1	60,900	12,760	21	-520	-1	-4,707	-8
Lake Meredith (Texas)	2	500,000	335,900	67	-400	0	-45,300	-9
Lake Meredith (Texas and Oklahoma)	(2)	779,560	335,900	43	-400	0	-45,300	-6
MacKenzie Reservoir	3	46,250	8,000	17	-30	0	-1,700	-4
White River Lake	4	31,850	11,590	36	-120	0	-4,750	-15
TOTAL		639,000	368,250	58	-1,070	0	-56,457	-9
LOW ROLLING PLAINS								
Greenbelt Reservoir	5	58,200	23,630	41	420	1	-1,770	-3
Lake Kemp	6	319,600	146,700	46	6,500	2	2,900	1
Miller's Creek Reservoir	7	27,890	7,850	28	-4,100	-15	-2,850	-10
Fort Phantom Hill Reservoir	8	70,030	38,490	55	-670	-1	18,040	26
Lake Stamford	9	52,700	8,810	17	-30	0	-2,490	-5
Lake J. B. Thomas	10	202,300	26,260	13	-910	0	-2,790	-1
Lake Colorado City	11	30,800	20,800	68	-200	-1	6,800	22
Champion Creek Reservoir	12	41,600	4,410	11	20	0	-630	-2
Hords Creek Lake	13	8,600	4,100	48	-40	0	885	10
TOTAL		811,720	281,050	35	990	0	18,095	2
NORTH CENTRAL								
Lake Kickapoo	14	106,000	60,290	57	2,010	2	8,991	8
Lake Arrowhead	15	262,100	119,000	45	4,600	2	-11,300	-4
Lake Texoma	16	2,722,300	2,623,000	96	-99,300	-4	368,027	14
Pat Mayse Lake	17	124,500	124,500	100	0	0	13,764	11
Cooper Lake	18	273,000	273,000	100	0	0	47,499	17
Lake Sulphur Springs	19	17,710	17,710	100	0	0	3,652	21
Lake Tawakoni	20	936,200	936,200	100	0	0	190,700	20
Bridgeport Reservoir	21	374,830	214,300	57	14,600	4	1,335	0
Eagle Mountain Reservoir	22	178,380	124,700	70	11,300	6	-11,168	-6
Benbrook Lake	23	88,200	76,590	87	15,330	17	8,489	10
Joe Pool Lake	24	175,800	175,800	100	700	0	18,742	11
Ray Roberts Lake	25	798,760	603,600	76	52,500	7	19,548	2
Lewisville Lake	26	555,000	494,200	89	51,300	9	169,671	31
Grapevine Lake	27	187,700	182,300	97	32,300	17	52,982	28
Lavon Lake	28	443,800	443,800	100	0	0	144,869	33
Lake Ray Hubbard	29	413,420	413,420	100	0	0	0	0
Richland-Chambers Creek Lake	30	1,103,820	1,103,820	100	0	0	158,699	14
Navarro Mills Lake	31	55,810	55,810	100	0	0	16,793	30
Bardwell Lake	32	53,580	50,070	93	-3,510	-7	12,582	23
Hubbard Creek Reservoir	33	317,800	140,700	44	100	0	-58,200	-18
Lake Graham	34	45,000	37,880	84	920	2	-920	-2
Possum Kingdom Lake	35	551,820	487,500	88	8,600	2	63,200	11
Lake Palo Pinto	36	27,650	11,980	43	2,000	7	-17,092	-62
Lake Granbury	37	135,680	135,680	100	3,780	3	17,880	13
Lake Pat Cleburne	38	25,300	25,300	100	2,560	10	8,944	35
Whitney Lake	39	622,800	524,800	84	37,400	6	97,200	16
Waco Lake	40	144,500	144,500	100	0	0	38,062	26
Proctor Lake	41	55,590	21,310	38	2,280	4	723	1
Belton Lake	42	434,500	434,500	100	0	0	62,249	14
Stillhouse Hollow Lake	43	226,060	226,060	100	0	0	13,392	6
Lake Georgetown	44	37,010	36,570	99	10,980	30	11,312	31
Granger Lake	45	54,280	54,280	100	0	0	3,352	6
Lake Limestone	46	215,750	215,750	100	0	0	41,550	19
Lake Brownwood	47	143,400	108,600	76	500	0	25,570	18
TOTAL		11,908,050	10,697,520	90	150,950	1	1,521,097	13

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late January 2001 (acre-feet)	(%)	Change since Late December 2000 (acre-feet)	(%)	Change since Late January 2000 (acre-feet)	(%)
EAST								
Wright Patman Lake	48	142,700	142,700	100	0	0	0	0
Lake Cypress Springs	49	66,800	66,800	100	0	0	4,100	6
Lake Bob Sandlin	50	202,300	202,300	100	0	0	20,000	10
Lake O' the Pines	51	252,000	252,000	100	0	0	20,085	8
Lake Fork Reservoir	52	635,200	635,200	100	0	0	52,900	8
Toledo Bend Reservoir	53	4,472,900	4,472,900	100	400,900	9	997,900	22
Lake Palestine	54	411,300	411,300	100	0	0	57,000	14
Lake Tyler	55	73,700	73,700	100	0	0	1,905	3
Sam Rayburn Reservoir	56	2,876,300	2,876,300	100	464,300	16	1,000,300	35
B. A. Steinhagen Lake	57	94,200	69,790	74	-9,860	-10	41,479	44
Cedar Creek Reservoir	58	637,050	637,050	100	0	0	85,425	13
Lake Livingston	59	1,750,000	1,750,000	100	0	0	0	0
Lake Conroe	60	429,900	422,900	98	4,400	1	47,900	11
TOTAL		12,044,350	12,012,940	100	859,740	7	2,328,994	19
TRANS-PECOS								
Red Bluff Reservoir	61	307,000	68,420	22	3,310	1	-19,480	-6
TOTAL		307,000	68,420	22	3,310	1	-19,480	-6
EDWARDS PLATEAU								
E. V. Spence Reservoir	62	488,760	84,340	17	-1,000	0	27,760	6
Twin Buttes Reservoir	63	177,800	8,350	5	490	0	1,898	1
O.C. Fisher Lake	64	119,200	9,930	8	-130	0	2,165	2
O. H. Ivie Reservoir	65	554,340	317,900	57	-1,000	0	2,800	1
Lake Buchanan	66	896,980	745,100	83	8,000	1	138,422	15
Amistad Reservoir (Texas)	67	1,771,030	1,147,000	65	62,000	4	100,000	6
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	1,329,000	42	83,000	3	-74,000	-2
TOTAL		4,008,110	2,312,620	58	68,360	2	273,045	7
SOUTH CENTRAL								
Somerville Lake	68	155,060	155,060	100	0	0	13,300	9
Lake Travis	69	1,144,100	1,144,100	100	0	0	328,140	29
Canyon Lake	70	385,600	385,600	100	1,700	0	30,170	8
Coletto Creek Reservoir	71	35,060	31,600	90	660	2	4,370	12
Medina Lake	72	254,000	200,800	79	12,400	5	3,100	1
TOTAL		1,973,820	1,917,160	97	14,760	1	379,080	19
UPPER COAST								
Lake Houston	73	128,860	128,860	100	0	0	23,060	18
Lake Texana	74	157,900	157,900	100	200	0	49,100	31
TOTAL		286,760	286,760	100	200	0	72,160	25

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

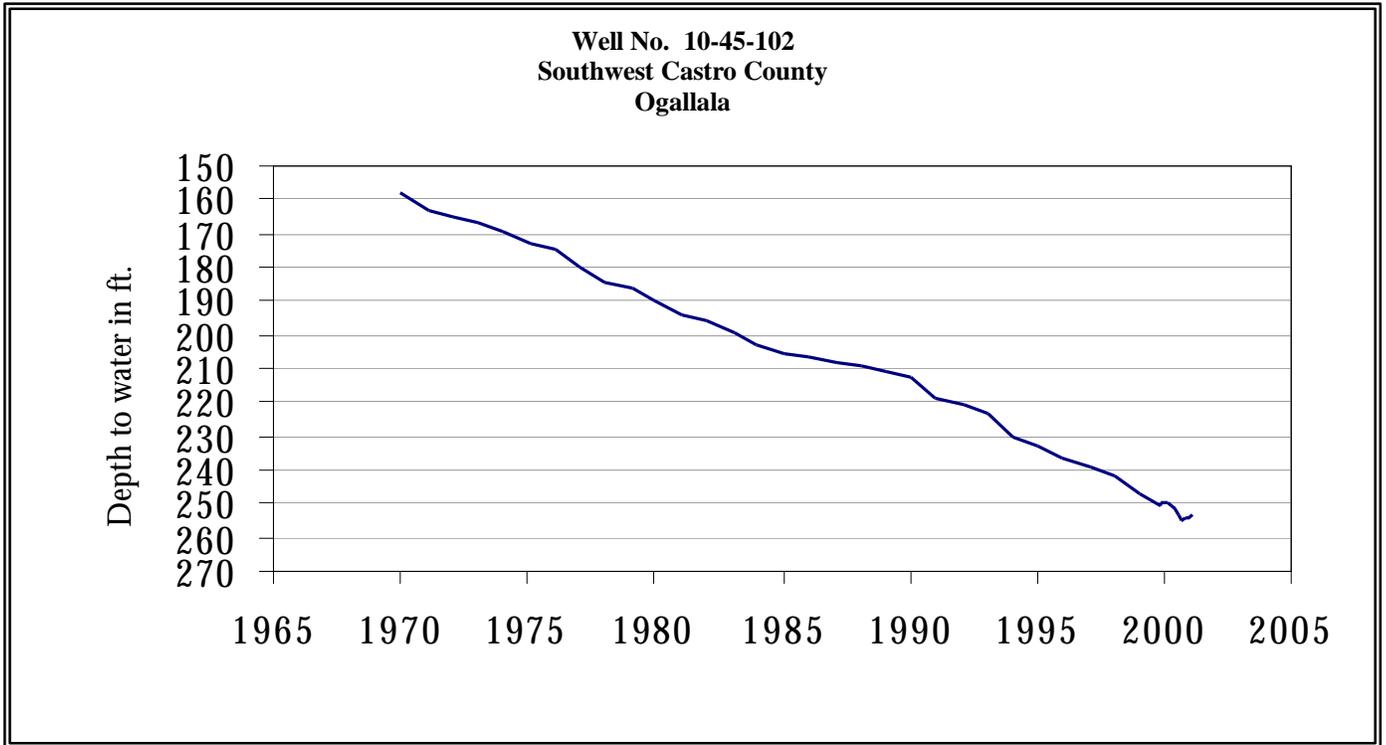
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late January 2001 (acre-feet) (%)	Change since Late December 2000 (acre-feet) (%)	Change since Late January 2000 (acre-feet) (%)
SOUTHERN					
Choke Canyon Reservoir	75	695,260	273,000 39	3,000 0	-20,000 -3
Lake Corpus Christi	76	241,240	105,300 44	4,900 2	-40,000 -17
Falcon Reservoir (Texas)	77	1,555,120	281,000 18	-21,000 -1	-27,000 -2
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	333,000 13	-10,000 0	-279,000 -11
TOTAL		2,491,620	659,300 26	-13,100 -1	-87,000 -3
 STATE TOTAL		 34,470,430	 28,604,020 83	 1,084,140 3	 4,429,534 13

Note:

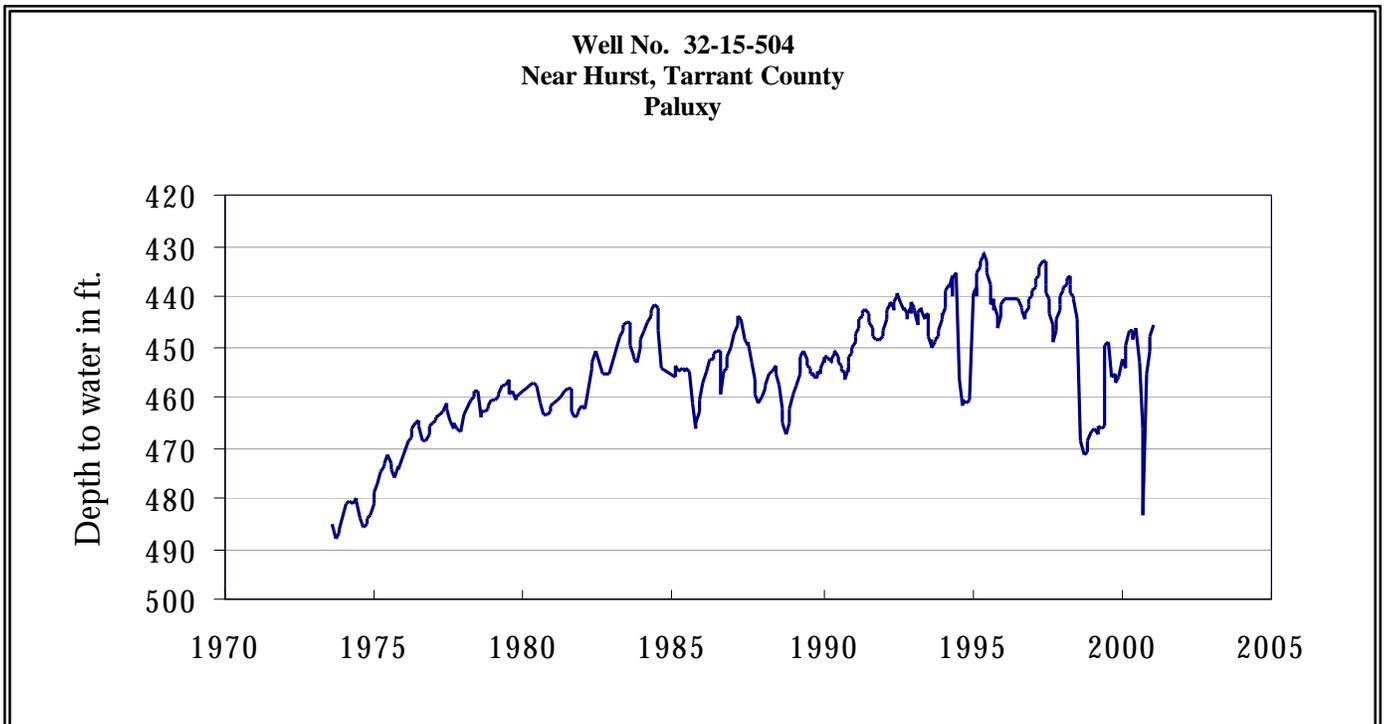
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included is any water in flood control storage (above the top of conservation pool or normal maximum operating level), or any water in so called dead storage (in the bottom of the reservoir, below the invert of lowest outlet works and consequently not removable by gravity flow alone.) Percentage of conservation storage is based on the conservation storage capacity of the reservoir and the conservation storage in the reservoir for date shown. Percent change is given by % Change = 100 * (current conservation storage - past conservation storage)/conservation storage capacity.

Current data are based on elevations near end of month at 77 reservoirs that together represent 98 percent of the total conservation storage capacity of major Texas reservoirs (those with capacity of 5,000 acre-feet or more each). Figures in parentheses for Lake Meredith represent the total conservation storage excluding 58,014 acre-feet of dead storage and are not included in State total. Preliminary figures are shown for the United States' share of conservation storage in International Amistad and International Falcon Reservoirs; the estimates may be subject to revision on completion of international water accounting. Texas (United States' share) and Mexico and are not included in State total.

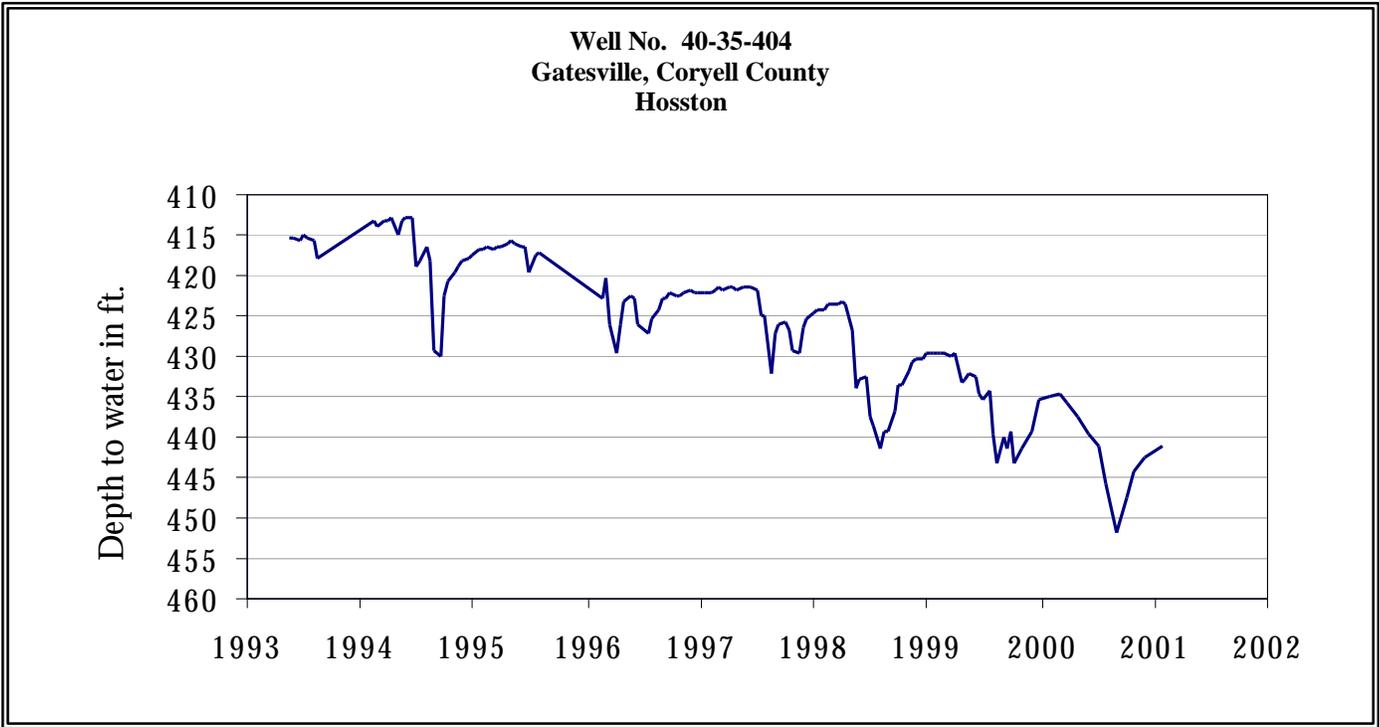
JANUARY GROUND WATER LEVELS IN OBSERVATION WELLS



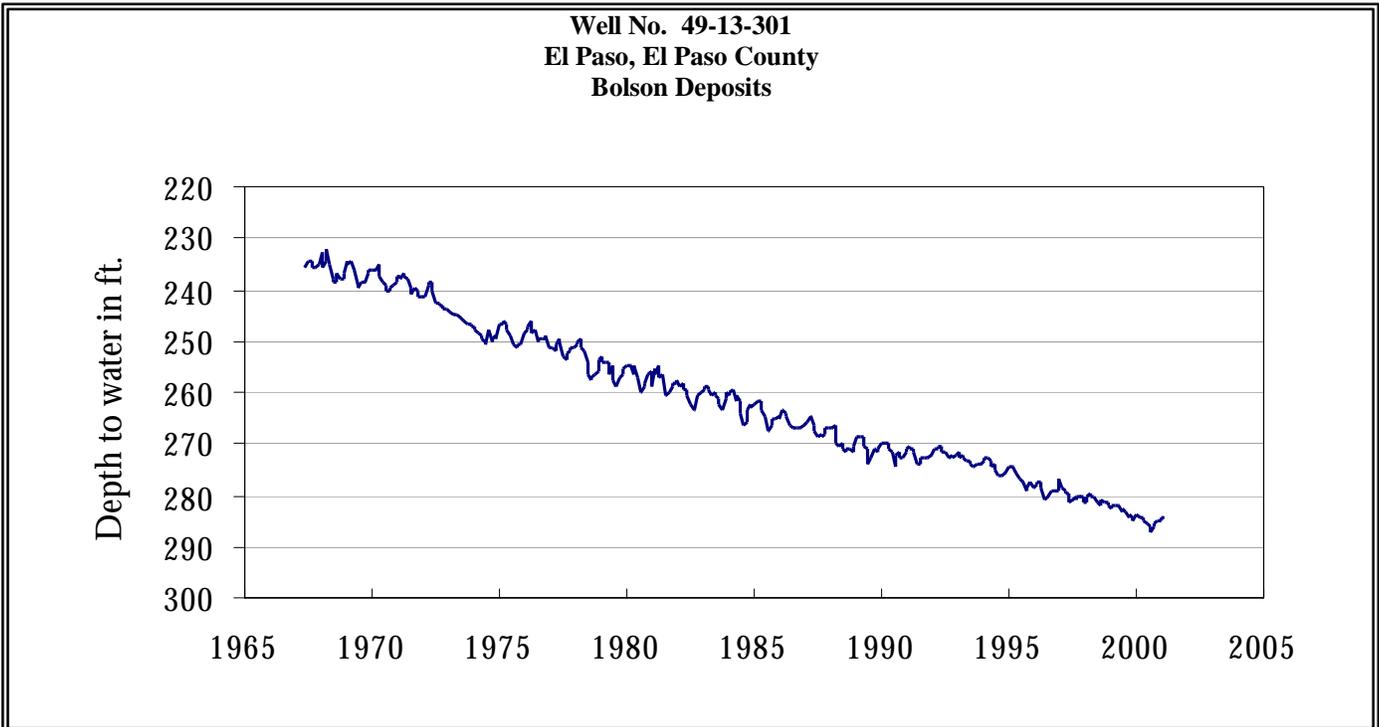
The late January water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was 253.46 feet below land surface. This measurement was 0.23 feet above last month's measurement, 4.00 feet below last year's measurement, and 97.46 feet below the initial measurement recorded in 1968.



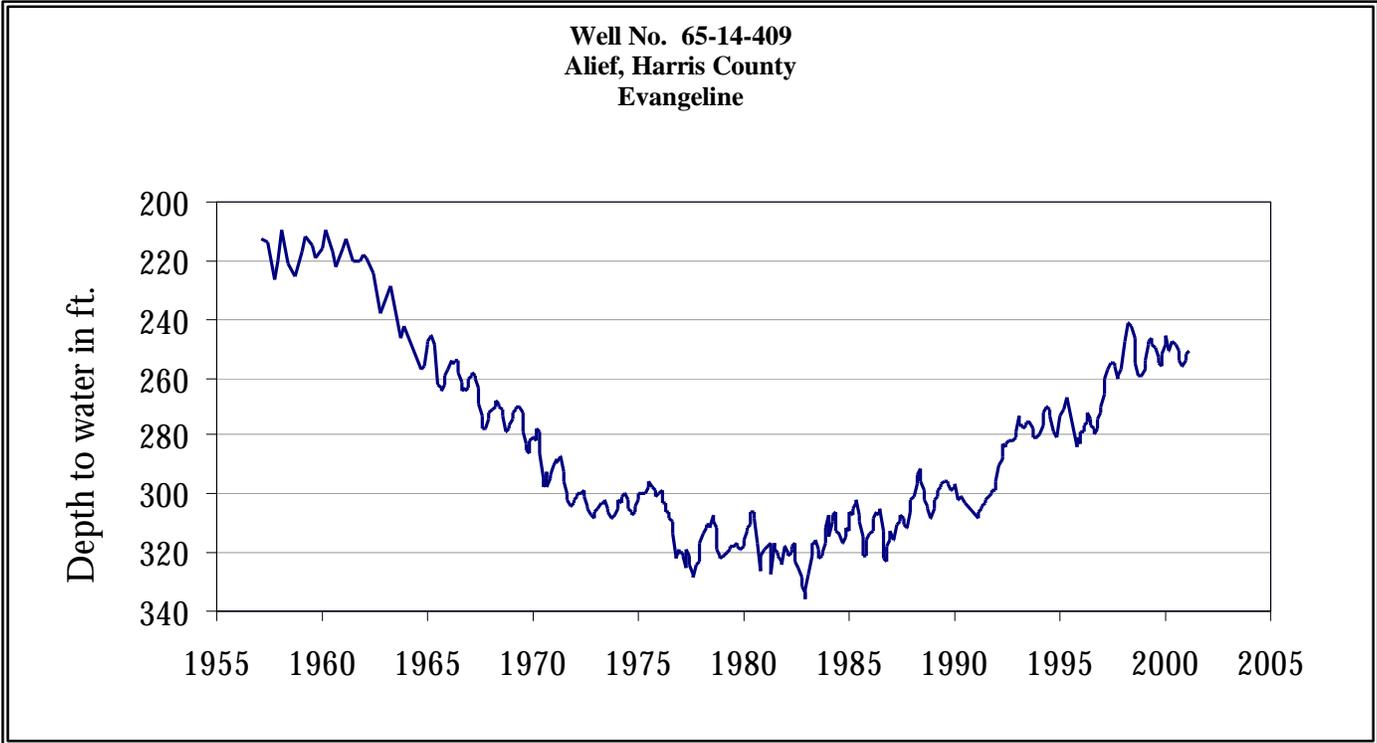
The late January water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 445.62 feet below land surface. This measurement was 2.62 feet above last month's measurement, 8.55 feet above last year's measurement, and 52.23 feet below the initial measurement recorded in 1953.



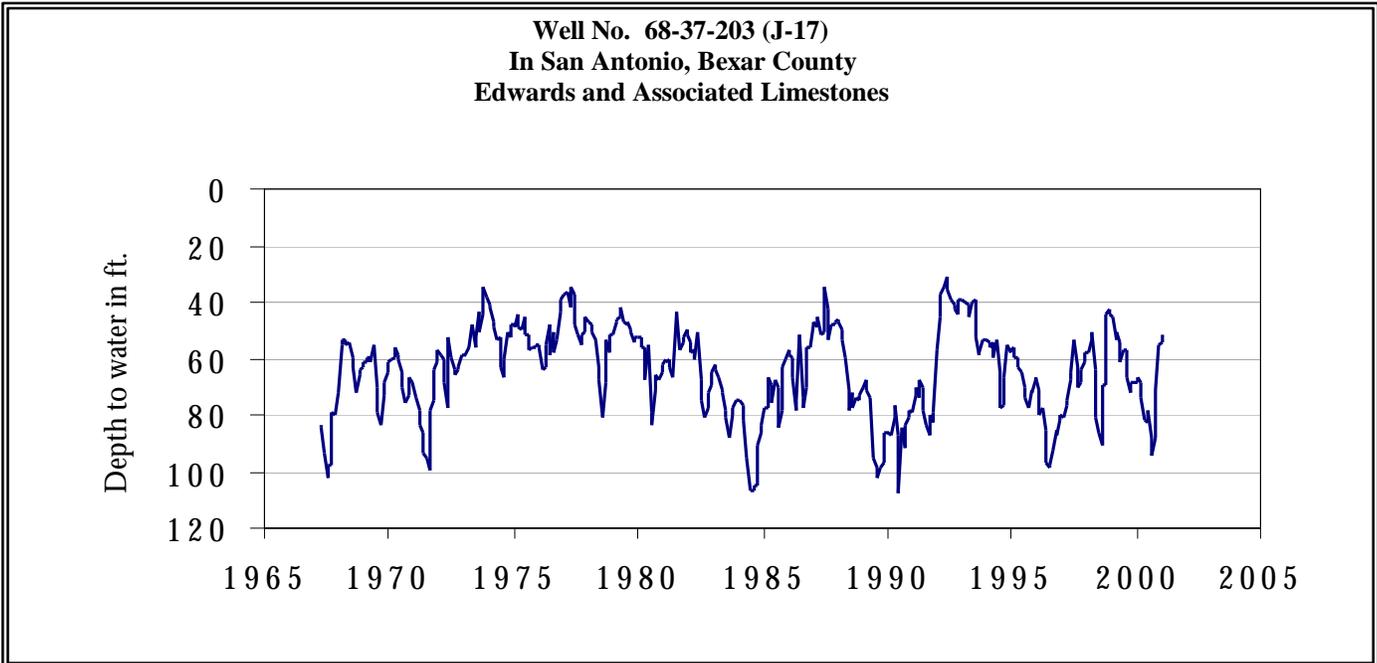
The late January water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 441.00 feet below land surface. This measurement was 0.89 feet above last month's measurement, 5.93 feet below last year's measurement, and 149.00 feet below the initial measurement recorded in 1955.



The late January water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 284.39 feet below land surface. This was 0.16 feet above last month's measurement, 0.32 feet below last year's measurement, and 52.49 feet below the initial measurement recorded in 1964.

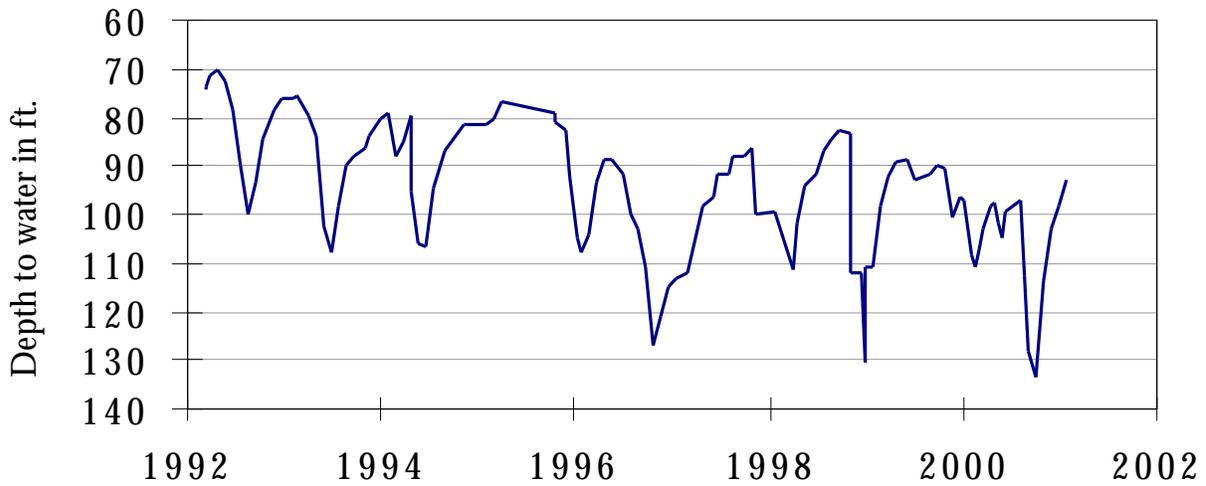


The late January water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 250.48 feet below land surface. This was 1.91 feet above last month's measurement, 4.23 feet below last year's measurement, and 147.25 feet below the initial measurement recorded in 1947.



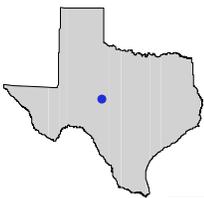
The late January water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 51.20 feet below land surface. This was 3.21 feet above last month's measurement, 15.68 feet above last year's measurement, and 8.42 feet above the initial measurement recorded in 1962.

Well No. 68-60-912
Between Poteet and Pleasanton, Atascosa County
Carrizo



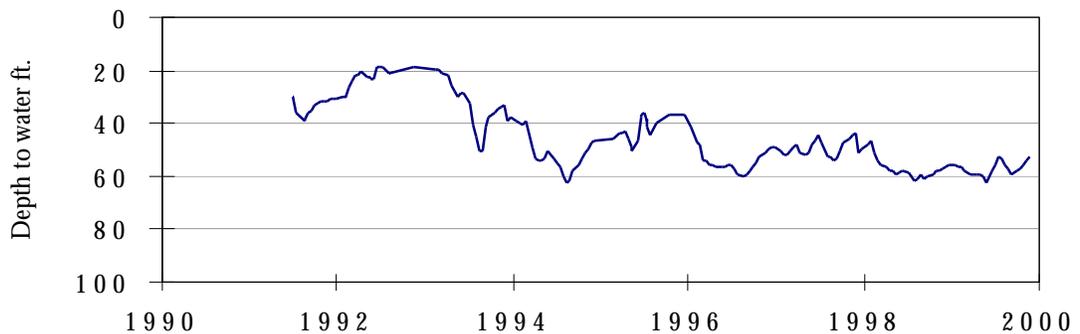
The late January water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 92.61 feet below land surface. This measurement was 5.36 feet above last month's measurement, 5.81 feet above last year's measurement, and 11.36 feet below the initial measurement recorded in 1965.

HYDROGRAPH OF THE MONTH



Each month this space features a new hydrograph (marked with the • symbol on the map) depicting different aquifers and different conditions in Texas.

Well No 4337908
Tom Green County



This 115 ft. deep well, located about 5 miles southeast of downtown San Angelo, at an elevation of 1868 feet above sea level, was completed in the Leon formation aquifer. The shallow Leon formation is recharged by rainfall events; water levels reflect typical reservoir drawdown due to increased regional groundwater demands.

